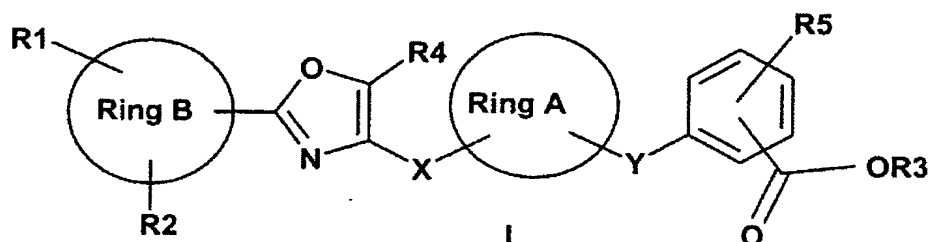


We claim:

DEAV2003/0017

Dr. WI

1. A compound of the formula I



wherein

Ring A is (C₃-C₈)-cycloalkanediyl or (C₃-C₈)-cycloalkenediyl, wherein one or more carbon atoms in said (C₃-C₈)-cycloalkanediyl and (C₃-C₈)-cycloalkenediyl groups is optionally replaced by oxygen atoms;

Ring B is a) phenyl; or

b) (C₃-C₈)-cycloalkyl, an 8-, 9-, 10, 11-, 12-, 13- or 14-membered aromatic ring, or a 5-, 6-, 7-, 8-, 9-, 10-, 11- or 12-membered heteroaromatic ring optionally containing one, two, three or four heteroatoms selected from the group consisting of N, O and S;

R1 is a) in the case where ring B is selected from a) above: SCF₃, OCF₂-CHF₂, O-phenyl or O-(C₁-C₆)-alkyl-O-(C₁-C₃)-alkyl;

b) in the case where ring B is selected from b) above: H, F, Cl, Br, OH, NO₂, CF₃, OCF₃, OCF₂-CF₃, SCF₃, OCF₂-CHF₂, O-phenyl, (C₁-C₆)-alkyl, O-(C₁-C₆)-alkyl or O-(C₁-C₆)-alkyl-O-(C₁-C₃)-alkyl;

c) in the case ring B is selected from a) above and R4 is phenyl: (C₁-C₆)-alkyl or O-(C₁-C₆)-alkyl;

R2 is H or CF₃;

R4 is a) in the case where ring B is selected from a) above:
phenyl;

5 b) in the case where ring B is selected from b) above:
H, F, Cl, Br, OH, NO₂, CF₃, OCF₃, (C₁-C₆)-alkyl or O-(C₁-C₆)-alkyl;

10 c) in the case ring B is selected from a) above and R1 is
selected from a) above:
(C₁-C₆)-alkyl;

R5 is H, F, Cl, Br, OH, NO₂, CF₃, OCF₃, (C₁-C₆)-alkyl or O-(C₁-C₆)-alkyl;

R3 is H or (C₁-C₆)-alkyl;

15 X is (C₁-C₆)-alkanediyl, wherein one or more carbon atoms in said (C₁-
C₆)-alkanediyl group are optionally replaced by oxygen atoms;

Y is (C₁-C₆)-alkanediyl, wherein one or more carbon atoms in said (C₁-
C₆)-alkanediyl group are optionally replaced by oxygen atoms;
20

and pharmaceutically acceptable salts thereof.

2. The compound of Claim I wherein:

25

Ring A is (C₃-C₈)-cycloalkanediyl or (C₃-C₈)-cycloalkenediyl, wherein one or
more carbon atoms in said (C₃-C₈)-cycloalkanediyl and (C₃-C₈)-
cycloalkenediyl groups are optionally replaced by oxygen atoms;

30 Ring B is a) phenyl; or

b) (C₃-C₈)-cycloalkyl, an 8-, 9-, 10, 11-, 12-, 13- or 14-membered
aromatic ring, or a 5-, 6-, 7-, 8-, 9-, 10-, 11- or 12-membered
heteroaromatic ring optionally containing one, two, three or four
35 heteroatoms selected from the group consisting of N, O and S;

R1 is a) in the case where ring B is selected from a) above:
SCF₃, OCF₂-CHF₂, O-phenyl or O-(C₁-C₆)-alkyl-O-(C₁-C₃)-alkyl;

40 b) in the case where ring B is selected from b) above:

H, F, Cl, Br, OH, NO₂, CF₃, OCF₃, OCF₂-CF₃, SCF₃, OCF₂-CHF₂, O-phenyl, (C₁-C₆)-alkyl, O-(C₁-C₆)-alkyl or O-(C₁-C₆)-alkyl-O-(C₁-C₃)-alkyl;

- 5 c) in the case where ring B is selected from a) above and R₄ is phenyl:
(C₁-C₆)-alkyl or O-(C₁-C₆)-alkyl;
- 10 R is H or CF₃;
- R₄ is a) in the case where ring B is selected from a) above:
phenyl;
- 15 b) in the case where ring B is selected from b) above:
H, F, Cl, Br, OH, NO₂, CF₃, OCF₃, (C₁-C₆)-alkyl or O-(C₁-C₆)-alkyl;
- 20 c) in the case where ring B is selected from a) above and R₁ is selected from a) above:
(C₁-C₆)-alkyl;
- R₅ is H, F, Cl, Br, OH, NO₂, CF₃, OCF₃, (C₁-C₆)-alkyl or O-(C₁-C₆)-alkyl;
- R₃ is H or (C₁-C₆)-alkyl;
- 25 X is CH₂-O;
- Y is (C₁-C₆)-alkanediyl, wherein one or more carbon atoms in said (C₁-C₆)-alkanediyl group are optionally replaced by oxygen atoms.
- 30 3. The compound of Claim 2 wherein:
- Ring A is (C₃-C₈)-cycloalkanediyl wherein one carbon atom therein is optionally replaced by an oxygen atom;
- 35 Ring B is a) phenyl; or
- 40 b) (C₃-C₈)-cycloalkyl, an 8-, 9-, 10-, 11-, 12-, 13- or 14-membered aromatic ring, or a 5-, 6-, 7-, 8-, 9-, 10-, 11- or 12-membered heteroaromatic ring optionally containing one, two, three or four heteroatoms selected from the group consisting of N, O and

S;

R1 is a) in the case where ring B is selected from a) above:
SCF₃, OCF₂-CHF₂, O-phenyl or O-(C₁-C₆)-alkyl-O-(C₁-C₃)-alkyl;

5

b) in the case where ring B is selected from b) above:
H, F, Cl, Br, OH, NO₂, CF₃, OCF₃, OCF₂-CF₃, SCF₃, OCF₂-CHF₂,
O-phenyl, (C₁-C₆)-alkyl, O-(C₁-C₆)-alkyl or O-(C₁-C₆)-alkyl-O-(C₁-C₃)-
alkyl;

10

c) in the case where ring B is selected from a) above and R4 is
phenyl:
(C₁-C₆)-alkyl or O-(C₁-C₆)-alkyl;

15 R2 is H or CF₃;

R4 is a) in the case where ring B is selected from a) above:
phenyl;

20 b) in the case where ring B is selected from b) above:
H, F, Cl, Br, OH, NO₂, CF₃, OCF₃, (C₁-C₆)-alkyl or O-(C₁-C₆)-alkyl;

25 c) in the case where ring B is selected from a) above and R1 is
selected from a) above:
(C₁-C₆)-alkyl;

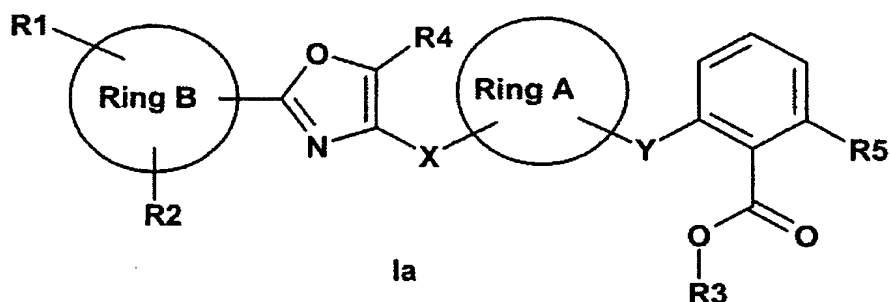
R5 is H, F, Cl, Br, OH, NO₂, CF₃, OCF₃, (C₁-C₆)-alkyl or O-(C₁-C₆)-alkyl;

30 R3 is H or (C₁-C₆)-alkyl;

X is CH₂-O;

Y is CH₂-O.

35 4. The compound of Claim 1 which has the formula Ia



wherein ring A, ring B, R1, R2, R3, R4, R5, X and Y are as defined in Claim 1.

5 5. The compound of Claim 4 wherein:

 R3 is H; and

 R5 is methyl.

10

 6. The compound of Claim 5 wherein:

 Ring A is (C₅-C₇)-cycloalkanediyl;

15 Ring B is a) phenyl; or

 b) (C₃-C₈)-cycloalkyl, an 8-, 9-, 10-, 11-, 12-, 13- or 14-
 membered aromatic ring, or a 5-, 6-, 7-, 8-, 9-, 10-, 11- or 12-
 membered heteroaromatic ring optionally containing one, two, three
 or four heteroatoms selected from the group consisting of N, O and
 S;

20

 R1 is a) in the case where ring B is selected from a) above:
 SCF₃, OCF₂-CHF₂, O-phenyl or O-(C₁-C₆)-alkyl-O-(C₁-C₃)-alkyl;

25

 b) in the case where ring B is selected from b) above:
 H, F, Cl, Br, OH, NO₂, CF₃, OCF₃, OCF₂-CF₃, SCF₃, OCF₂-CHF₂,
 O-phenyl, (C₁-C₆)-alkyl, O-(C₁-C₆)-alkyl or O-(C₁-C₆)-alkyl-O-(C₁-C₃)-
 alkyl;

30

 c) in the case where ring B is selected from a) above and R4 is
 phenyl;

(C₁-C₆)-alkyl or O-(C₁-C₆)-alkyl;

R₂ is H or CF₃;

5 R₄ is a) in the case where ring B is selected from a) above:
phenyl;

10 b) in the case where ring B is selected from b) above:
H, F, Cl, Br, OH, NO₂, CF₃, OCF₃, (C₁-C₆)-alkyl or O-(C₁-C₆)-alkyl;

c) in the case where ring B is selected from a) above and R₁
selected from a) above:
(C₁-C₆)-alkyl;

15 R₅ is methyl;

R₃ is H;

20 X is CH₂-O;

Y is CH₂-O.

7. The compound of Claim 6 wherein the central cycloalkanediyl ring is
attached 1,3-cis.

25 8. A pharmaceutical composition comprising a pharmaceutically acceptable
carrier and one or more compounds of Claim 1.

9. The pharmaceutical composition of Claim 6 further comprising at least one
30 additional active ingredient.

10. The pharmaceutical composition of Claim 9 wherein said additional active
ingredient has favorable effects on metabolic disturbances or disorders.

35 11. The pharmaceutical composition of Claim 9 wherein said additional active
ingredient is an antidiabetic.

12. The pharmaceutical composition of Claim 9 wherein said additional active ingredient is a lipid modulator.

13. A method of treating disorders of fatty acid metabolism and glucose utilization comprising administering to a patient in need thereof a therapeutically effective amount of a compound of Claim 1.

14. A method of treating disorders of insulin resistance comprising administering to a patient in need thereof a therapeutically effective amount of a compound of Claim 1.

15. A method of treating diabetes mellitus including the prevention of the sequelae associated therewith comprising administering to a patient in need thereof a therapeutically effective amount of a compound of Claim 1.

16. A method of treating dyslipidemia and sequelae associated therewith comprising administering to a patient in need thereof a therapeutically effective amount of a compound of Claim 1.

17. A method of treating metabolic syndrome and conditions associated therewith comprising administering to a patient in need thereof a therapeutically effective amount of a compound of Claim 1.

18. A method of treating disorders of fatty acid metabolism and glucose utilization comprising administering to a patient in need thereof a therapeutically effective amount of a compound of Claim 1 in combination with at least one further active compound.

19. A method of treating disorders of insulin resistance comprising administering to a patient in need thereof a therapeutically effective amount of a compound of Claim 1 in combination with at least one further active compound.